

shown in figure 9 b), the impacting wire (13) coming into contact with a pair of electrodes (5, 6) forms an electrical short circuit between the elements (5, 6). The electrical power supply (11), which is connected to the elements (5, 6), thus discharges through the section of wire bridging the two elements (5, 6). The discharge causes a high current flow through the bridging section of wire due to the low resistance presented by such a short section of conductive wire. As shown in figure 9c), the high current flow heats the wire (13) to melting point whereupon it breaks and falls free from the aircraft (2). The kinetic energy due to the aircraft's movement also aides (but is not essential) in severing the wire as it is heated ~~[[but]]~~ by the current flow.

LISTING OF THE CLAIMS

AMENDMENTS TO THE CLAIMS

Please amend the following of the claims which are pending in the present application:

1. (Currently amended) A wire-strike system including:
a wire cutter including at least one pair of electrodes, electrically insulated from each other and ~~mountable-mounted-upon to~~ an outer surface of an aircraft, said electrodes being connectable to a power source capable of generating an electrical potential difference between the electrodes and in the event of a wire-strike, supplying a short-circuit current flow through a portion of said wire connecting both electrodes.
2. (Original) A system as claimed in claim 1, wherein said electrodes are attached to an electrically insulated mounting base portion.
3. (Original) A system as claimed in claim 2, wherein said base portion and electrodes are formed as an elongated strip, wherein the electrodes are elongated and

located adjacent, but spaced apart from each other.

4. (Currently Amended) A system as claimed in claim 1, wherein a pair of electrodes ~~[[is]]~~ are orientated substantially parallel to each other.

5. (Previously presented) A system as claimed in claim 1, wherein at least one pair of said wire cutter electrodes are formed as an entrapment element, capable of guiding a wire, for severing, into an intersection between convergent deflector portions located either side thereof.

6. (Original) A system as claimed in claim 5, wherein said intersection is notched.

7. (Previously presented) A system as claimed in claim 5, wherein electrodes located on said deflector portions and/or said intersection are formed with an outward cutting edge.

8. (Previously presented) A system as claimed in claim 5, wherein electrodes of opposing polarity are positioned on opposing sides of said intersection.

9. (Previously presented) A system as claimed in claim 1, wherein said wire cutter includes a plurality of electrode pairs, independently energisable by said power source.

10. (Original) A system as claimed in claim 9, wherein said plurality of electrode pairs are capable of being simultaneously energised.

11. (Original) A system as claimed in claim 9 wherein said plurality of electrode pairs

are capable of being selectively energised.

12. (Original) A system as claimed in claim 11, further including sensing and control means for sensing the proximity of a wire and selectively energising an electrode pair closest the wire.

13. (Previously presented) A system as claimed in claim 11, wherein said proximity sensing means including capacitive or inductive sensors.

14. (Previously presented) A system as claimed in claim 1, wherein the wire cutter electrodes may be formed as a series of substantially equidistant, parallel conductors of alternately opposing electrical polarity.

15. (Previously presented) A system as claimed in claim 1, wherein said electrodes are provided with a rupturable, non-conductive coating or film.

16. (Previously presented) A system as claimed in claim 1, further including an electrical power source and electrical connections between said power source and the or each pair of wire cutter electrodes.

17. (Original) An aircraft provided with a wire-strike system as claimed in claim 1.

18. (Original) An aircraft provided with a wire-strike system including:

- a wire cutter including at least one pair of electrodes, electrically insulated from each other and mounted upon an outer surface of the aircraft, said electrodes being connected to a power source capable of generating an electrical potential difference

between the electrodes and in the event of a wire-strike, supplying a short-circuit current flow through a portion of said wire connecting both electrodes;

- an electrical power source, and
- electrical connections between said power source and the or each pair of wire cutter electrodes.

19. (Original) An aircraft as claimed in claim 18, wherein said electrodes are attached to an electrically insulated mounting base portion.

20. (Original) An aircraft as claimed in claim 19, wherein said base portion and electrodes are formed as an elongated strip, wherein the electrodes are elongated and located adjacent, but spaced apart from each other.

21. (Previously presented) An aircraft as claimed in claim 17, wherein said electrodes are fixed directly to electrically non-conductive portions of the aircraft's surface.

22. (Previously presented) An aircraft as claimed in claim 17, wherein said wire cutter electrodes are positioned on one or more leading surfaces of an aircraft.

23. (Previously presented) An aircraft as claimed in claim 17, wherein said at least one pair of said wire cutter electrodes are formed as an entrapment element, capable of guiding a wire for severing into an intersection between convergent deflector portions located either side thereof, said entrapment elements being positioned at one or more entrapment positions about the aircraft's surface.

24. (Previously presented) An aircraft as claimed in claim 17, wherein said wire cutter includes a plurality of electrode pairs, independently energisable by said power source.

25. (Original) An aircraft as claimed in claim 24, further including sensing and control means for sensing the proximity of a wire and selectively energising an electrode pair closest the wire.

26. (Previously presented) A method of severing a wire impacting an aircraft in a wire-strike, using a system including:

a wire cutter including at least one pair of electrodes, electrically insulated from each other and mountable upon an outer surface of an aircraft, said electrodes being connected to an electrical power source, said method including:

- generating an electrical potential difference between the elements;
- and in the event of a wire-strike, supplying a short-circuit current flow through a portion of said wire connecting both elements; and
- heating said portion of said wire connecting both elements until said wire at least partially melts and severs.